## INSTRUCTIONS FORM F20a REFINERY FUGITIVE VOC EMISSIONS

DAQ ID

Department of Environmental Quality Division of Air Quality

Division of Air Qualit

Salt Lake City, UT 84116 Telephone (801) 536-4000

(Sources include: valves, flanges, seals, and drains)

Pt. Source ID Provide the identification number the company associates with

the process.

For Office use only.

SCC Enter the appropriate Source Classification Code (SCC). See

page 16 of the General Instructions for explanation.

Source Description Choose from the following:

1. Process drains - Wastewater separators w/o recovery

systems and/or separator covers.

2. Process drains - Wastewater separator w/ recovery

systems and separator covers.

3. Asphalt blowing.

4. Blind charging.

Vacuum jets.

Cooling towers.

7. Misc. sampling, sweetening, purging.

8. Pipeline valves.

9. Pipeline flanges.

10. Pump seals.

11. Mechanical pump seals.

12. Dual pump seals.

13. Purged seals.

14. Compressor seals.

15. Vessel relief valves.

16. Open ended lines and sampling valves.

Process Stream Type Select the following type of streams:

I. All streams.

II. Gas streams.

III. Light liquid and gas/liquid streams.

IV. Heavy liquid streams.

V. Hydrogen streams.

Number of Units List the total number of units in operation emitting fugitive

hydrocarbons (note: this is not the total checked for the year, it is

the actual number of units).

Refinery Feed or Water Specify feedstocks, products, or water.

Amount State the thru-put of feedstocks, products, or water.

Units Specify the thru-put units in 10<sup>3</sup> bbl per year or 10<sup>3</sup> gals per year.

Emission Control Code Describe the control technology used such as traps, covers,

vapor recovery, etc. (Note: this field should be left blank if leak/no

leak emission factors were used).

% Control Efficiency Give the efficiency of the control method used.

If Control Is Other, List Describe the control equipment if other method was used.

VOC Emissions Calculate the amount of VOC in tons per year. **Provide complete** 

calculations on a separate sheet.

Estimate Code Provide the method code for quantifying actual emissions of each

pollutant. The valid method codes are listed in Table 6, page 25 of the General Instructions. If estimate code **8** (EPA Emission Factor) is used, also include the specific AP-42 section used in

the Comments field; see page 14 for a link to AP-42.

Emission Factor Provide the emission factor used to calculate the estimated VOC

emissions. This emission factor is the weighted average of the

emission factor for leakers and the emission factor for

nonleakers.

Units Please provide the units of emission factor for the purpose of

review, such as lb/10<sup>3</sup> gal, lb/10<sup>3</sup> bbl, or kg/hr/source.

Percent Leakers Provide the percentage of leakers of those checked for the entire

year.

**Emission Factor** 

for Leakers

Give the emission factor for leakers.

Units Provide the associated emission factor unit such as lb/hr/source

or kg/hr/source; the latter is preferred.

Emission factor for

Nonleakers

Give the emission factor for nonleakers.

Units Provide the associated emission factor unit.

Comment Provide any additional information necessary for calculation of

emissions.